INTERPRETING IN INTERNATIONAL SIGN: DECISIONS OF DEAF[10] AND NON-DEAF INTERPRETERS

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Abstract

The professional use of Deaf Interpreters (DIs) is increasing in several countries and across several contexts. However, there have been few studies that have explored the nature of the work when it involves a Deaf and non-deaf interpreting team. The current study examined the work of two teams of Deaf/non-deaf interpreters providing service in a conference setting. The participants were videotaped while providing service in order to examine the linguistic decisions made by non-deaf interpreters acting as a natural signed language feed, the linguistic decisions made by Deaf interpreters working into International Sign (IS), as well as the meta-communication strategies the team used while constructing the interpretation. The data suggest that interpreting teams that are more familiar with each other rely on different strategies when chunking information, asking for feeds, and for making accommodations. There also appear to be significant differences in the work

[10] The participants in this study are either Deaf members of the Deaf community (Deaf) or hearing interpreters who are not native members of the Deaf community (non-Deaf).

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when the two interpreters share a common natural signed language. All of the data analyzed thus far offer insight into the nature of the relationship and may provide guidance to those arranging interpreting services for international events.

Keywords: Deaf interpreting, team interpreting, Deaf-hearing team, linguistic decisions, chunking, feeds, accommodations, interpreter educators.

Introduction

This paper reports some of the preliminary findings of a collaborative study of the work of Deaf and non-Deaf interpreters.[12] The professional use of Deaf Interpreters (DIs) is a relatively new development (Boudreault 2005) and as such there have been few studies about the nature of interpreting by Deaf interpreters. However, what is clear is that interpreter organisations such as the Registry of Interpreters for the Deaf are recognizing the importance of training and standards, and have developed processes to certify Deaf interpreters. In Canada, Deaf interpreters have provided interpretation between two signed languages, American Sign Language (ASL) and Langue de Signes Quebecoise (LSQ). Additionally, we see increased work opportunities for Deaf interpreters providing platform interpretation at international conferences, or providing interpretation of televised news broadcasts, as in the case of the United Kingdom (see Stone 2009). As well, in the US, Canada and the UK many of the interpreters working with Deaf-blind consumers have been Deaf.

Boudreault (2005) addresses the numerous roles that Deaf interpreters perform, and his chapter emphasizes the need for increased research about Deaf interpreting. While there is research on language contact between users

[12] Thanks to Ricky Ferracuti for coding the data during his research internship.

of different signed languages, and attempts to examine the structure and lexicon of International Sign (Allsop et al. 1994; Suppalla & Webb 1995; Rosenstock 2008) and International Sign interpreting (McKee & Napier 2002), to date there have been no studies which have explored the use of Deaf/non-Deaf teams and the approaches used by those teams in order to provide interpreting services in IS (see Ressler 1999 for an analysis of ASL/ASL non-Deaf/Deaf teams in 'lab' conditions with no audience present).

Objective of Study

The objective of the current study is to provide insight into the phenomena of how Deaf/non-Deaf teams of interpreters work together to provide effective IS interpreting services. This exploratory study will highlight the assumptions, preparation approaches, decisions and strategies made by team members working at an international conference. Based on these findings, the analysis tools and interview protocols will be refined and then applied to a larger sample of teams of interpreters. Several research questions guided the study, and for the purposes of this paper, we have drawn data that stemmed from the following questions:

> *What are the linguistic strategies used by the feed interpreter when processing spoken English to British Sign Language (BSL) or American Sign Language (ASL) for the platform interpreter working from BSL or ASL to IS?*
>
> *What are the linguistic strategies used by the feed interpreter when processing spoken English to IS for the platform interpreter working from IS to IS?*
>
> *Across teams, are there similar strategies used by both feed interpreters?*

Methodology

This qualitative study used a purposive sample technique (Ritchie and Lewis, 2003:78) to select two teams of international sign interpreters, each comprised of a Deaf interpreter and a non-Deaf interpreter. Interpreters were videotaped in order to explore the interpretation from the stance of discourse-based and pragmatic-based decisions, interpreter presence and influence on the service user experience.

Interpreters were recruited from a pool of interpreters working at an international event in Canada during July 2010. All of the interpreters recruited from that event have at least 10 years of experience of providing IS interpreting for international events. A total of 4 IS interpreters were selected.

The Participants

For this paper we specifically focus on the two pairs of Deaf Interpreter (DI) with non-Deaf co-interpreter (CI) working as a team from spoken English into IS in an international setting. These interpreters had different levels of experience working as interpreters and working within teams of this kind. The interpreters also had different language backgrounds: one of the pairs worked with BSL as the feed language and the other worked with ASL.

The international conference setting had English as the language of spoken communication with speech to text reporting (STTR) provided, alongside interpreting into the national sign language and IS. In addition to the team of interpreters working with IS (the object of this research), there was also a non-professional French/English interpreter and a team of two sign language interpreters working from spoken English into the national sign language (non-Deaf interpreters – nDI). Among the conference participants there were non-English speakers.

The sign language interpreters worked in a simultaneous mode and the non-professional French/English interpreter worked consecutively via microphone from the conference floor (as opposed to working via an interpreter booth). This gave further time for the teams to ensure clarity of production and is worth bearing in mind when considering our findings.[13]

The Data Collection Approach

We video recorded the interpreting performance of both the DI and CI using a zi8 Kodak HD pocket video camera because of its good audio quality. For this analysis we examined 25 minutes 32 seconds of work from team 1 (DI1 and CI1), and 23 minutes 15 seconds of work from team 2 (DI2 and CI2).[14] Furthermore, we conducted semi-structured interviews with each interpreting team after the interpreting event.

We imported the video footage into ELAN[15], free open source software commonly used for sign language and gesture analysis. ELAN allows the user to create complex time-aligned annotations of several audio and video streams. We imported the video of the DIs and the CIs, ensuring the footage was adjusted to start at the same time and then annotated the video data using time-aligned tiers to make note of the strategies the interpreters used within this assignment.

Findings

In the following sections we will detail the findings from our data. This will include strategies used by CIs and then those used by DIs. It is worth noting

[13] Thanks to Bo Hårdell for a clarifying question at the WASLI conference 2011.

[14] We also recorded the work of the nDI working between English and ASL although this article will not contain an analysis or comparison of their work with the DI/CI teams.

[15] http://www.lat-mpi.eu/tools/elan/.

that although many of the features described are also found in Ressler (1999), our findings categorize these features into their functions within the teams and with an audience present, placing intra-team communication within an ecologically valid context.

CI strategies

Thus far in our analysis we have identified three different areas where strategies emerged:

Chunking indicators

Accommodations

Affirmations

These strategies for working as *feed interpreters* with DIs appear to ensure that the DI has full access to the information and to ensure the team is functioning well. All of these were interpreter contributions that were not attributable to the source language (SL), i.e. interpreter generated (Metzger 1999; Wadensjö 1998; Berg-Selgison 1990). We will now give further explanations of these strategies and specific examples of their use within this setting.

Chunking indicators

We defined chunking indicators as elements in the interpretation that functioned to clearly identify a completed piece of information or *chunk* as decided by the CI. These were labeled holds, pauses or drops. The holds were extensions of a final hold of a sign and the holding of a sign, an index or the initial letter of a fingerspelling:

sign index fingerspelling

Figure 1 Extensions of a final hold

There were two types of pauses and these were manual pause markers with one hand on the other hand or hands up pauses (fig. 2):

manual marker hand up hands up

Figure 2 Pauses

There were hand drops at the end of the sentence (fig. 3):

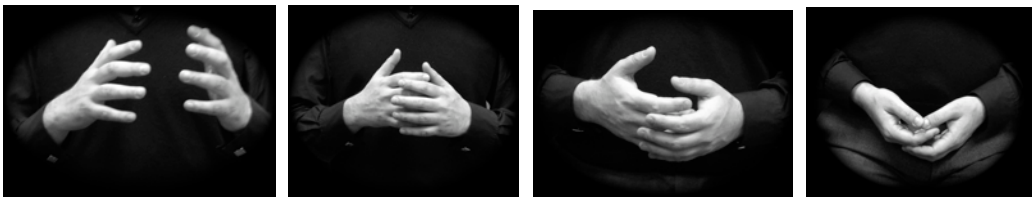

Figure 3 Sequence showing dropping hands

We then noted the number of chunk indicators of each CI (table 1):

Table 1 CI chunk indicators

	CI1 (25'32")	CI2 (23'15")
Extended: sign	21	4
Extended: index	7	
Extended: fingerspelling	2	
Pause: marker	28	3
Pause: hands up	36	7
Drops	17	72
Total	111	86

Here we see that CI1 used proportionally more chunk indicators implying each chunk was a shorter unit of text for DI1 to work with and conversely CI2 used proportionally fewer chunks implying that each chunk was a longer unit of text for DI2 to work with. Team 2 (DI2 and CI2) have worked together more frequently than team 1 (DI1 and CI1); this was team 1's first time working in this manner and might account for the difference.

Accommodations

These elements indicate that information the CI is delivering was in process (not complete), (i.e. the opposite of the chunk indicators), and they were used to ensure that the DI was aware of the continuing nature of the information while allowing the CI to receive a complete chunk of information. Again we saw holds (i.e. extensions of the final hold position of a sign) being used; we also saw repetitions of manual signs.

Table 2 CI accommodations

	CI1 (25'32")	CI2 (23'15")
Extended: sign	52	63
Repetitions	14	3
Total	66	67

If we compare the chunk indicators and the accommodations, we see that CI1 and CI2 have different styles when working as feeders to DIs. CI1 uses

extended signs both as chunk indicators and as an accommodation, whereas CI2 predominantly uses drops as a chunk indicator and extended signs as an accommodation. As there appears to be no difference in the production of extended signs for these two different functions, the use of different manual indicators for two different aspects of intra-team communication may also be an indication of experience within team 2.

Affirmations

These elements in the interpretation were used to support the DI and affirm the IS rendering of information while also indicating the continuation of the SL. As such this could be considered a subtype of accommodation, although we treat them separately. In the main these manifested as head nods: rapid, slow, or slow to rapid; although on occasion there was a short interaction (e.g. CI1 asking DI1, "Am I ok for you?"). The affirmation head nods predominantly co-occurred with other elements.

Table 3 CI affirmations

Head nods	Co-occur with	CI1 (25'32")	CI2 (23'15")
Rapid	Alone	4	
	Signs	4	
	Fingerspelling	2	
	Manual Pause	9	
	Total	19	0
Slow	Signs	1	13
	Manual Pause	14	
	Drops	7	11
	Total	22	24
Slow to rapid		1	
	Total	42	24

The rapid head nods only manifest in CI1's interpretation and specifically to indicate that further information is coming; CI1 uses slow nods for affirmation of DI1's work. CI2 specifically manifests slow nods during

manual signs to indicate further information is coming and slow nods during drops for affirmation. We will now detail the strategies of the DIs.

DI Strategies

We have identified two strategies from the DIs so far in our data analysis. These are the chunking of the IS and specific feed requests from the CIs. As with the information delivery and management strategies of the CIs, these are interpreter generated.

Chunk indicators

These elements manifested in similar ways to the CIs in that we saw holds, pauses and drops. They function as clause, sentence or discourse boundary markers for the audience. In table 4 we compare the chunk indicators of the DIs and the CIs.

Table 4 DI and CI chunk indicators

	DI1	CI1	DI2	CI2
Extended: sign	27	21	10	4
Extended: index	7	7		
Extended: fingerspelling		2		
Pause: marker	72	28	163	3
Pause: hands up	31	36	3	7
Drops	18	17		72
Total	155	111	176	86

The most common strategy employed by the DIs to indicate a clausal or discourse boundary is a manual pause marker, which has been called handclasp (Nicodemus 2009), although there is a clear preference with DI2 for using this solely. Similarly DI2 overtly chunks far more frequently than DI1, especially considering we have almost two minutes more data of team 1 than team 2.

We also see that the DIs have more audience orientated chunk indicators than the CIs provide in the feed interpretation, (155 vs 111; 176 vs 86). We see that the DIs are therefore able to chunk the target language (TL) differently from the feed interpretation; although the teams work well together the CIs do not exert influence on the DIs in terms of when and where to chunk information.

Feed requests

These elements occur when the DI explicitly requests the CI to continue interpreting or to repeat an interpretation. Although interpreter-generated these are transparent elements to the Deaf audience and inform them of the interpreting process.

Table 5 DI Feed requests

	DI1	DI2
Extended: sign + gaze	16	17
Pause: marker + gaze	7	56
Nods		68
Total	23	141

If we now look at both the chunk indicators (C Ind) and the feed requests (FR) that co-occur with them, we gain a greater understanding of the different approaches DI1 and DI2 take when undertaking IS interpreting.

Table 6 DI strategies

	DI1		DI2	
	C Ind	FR	C Ind	FR
Extended	34	16	10	17
Pause: marker	103	7	166	56
Nods				68
Drops	18			
Total	155	23	176	141

We can see that DI1 requests more feeds when indicating a chunk by an extended hold of a sign. DI2 not only requests significantly more feeds, but these either occur during a marked pause or by nodding. For both DIs gaze is important as a request for the CIs to continue interpreting.

Discussion

We will now explore the relevance of the findings and some of the factors that may help to explain the difference in how the strategies manifest in the different teams. We will then discuss the implications for interpreters and for interpreter educators.

Team dynamics

The two teams are different in a number of ways. Although team 1 has worked on the same interpreting team before, CI1 has never worked as a feed interpreter for DI1; they are less familiar working with each other in this way and have different first sign languages. CI1's first sign language (ASL) is the language used when teams 1 and 2 talk within the larger team and is the feed language CI1 uses with DI1. Team 2 has worked together in a number of situations before in this way, including working with another spoken language via an interpreter, they have the same first sign language, which is used as the feed language by CI2 with DI2.

When looking at the different types of indicators (chunks, accommodations, affirmations, etc.) used by team 1 there is a much more even spread of types when compared with team 2. Table 7 shows the number of types of elements used within each team with team 1 using over double the number of types within each strategy compared to team 2.

Table 7 Strategy types (10% and above)

	Types	
CI strategy	Team 1	Team 2
C Ind	4	1
Acc	2	1
Affirm	2	1
Total	*8*	*3*
DI strategy	Team 1	Team 2
C Ind	4	1
FR	1	2
Total	*5*	*3*
Total	13	6

We would suggest that this difference is due to team 1 becoming accustomed to each other with CI1 employing a variety of types to ensure that DI1 is comfortable with the feed; this is confirmed in the interview data. This could also result in DI1 being influenced by CI1 when producing IS.

An additional complication may stem from the feed language of CI1 being ASL, which is both the majority sign language in Canada and also a 'dominant' world sign language (so dominant that ASL has been described as a killer language - see Skutnabb-Kangas 2008 for a full description of high status killer languages, such as English). ASL's status in the 'Deaf-world' appears to be different from that of other sign languages and, although not the same, is akin to English in the mainstream (see Hiddinga and Crasborn 2011 for further discussion). Although DI1 is fluent in ASL with this being the feed language it may well be that ASL discourse norms are influencing the number of different types of indicators produced (i.e. its lingua franca status ultimately influences the team and the intra-team communication). Alternatively, as DI1 is an experienced and well respected IS interpreter well practiced in producing a TL tailored to the audience, this may have led to a greater variety of indicators to make the IS text as clear as possible. This may have been a minor factor, but one worth bearing in mind.

Team two was more consistent using a single indicator type for a single strategy. DI2 uses manual pause markers to chunk for the audience; CI2 uses drops to chunk for DI2. CI2 uses extended signs for accommodations and slow nods indicate affirmations. DI2 uses gaze and nods for feed requests. Rather than negotiating strategies, as team 1 appear to be doing, team 2 appear to judge the information flow required according to DI2's interpreting process. Much of the team interaction is subtle but it does appear that teams getting to know each other may use a greater number of types and that this may depend upon the language combination of the team.

Implications for Interpreters and Interpreter Educators

The first implication for interpreters working in such teams is to examine the conversations they have with each other prior to interpreting. For example, this data set show that the interpreting team that had less experience working with each other appear to be working out strategies while they are interpreting. In contrast, the team that had a common signed language and had experience with each other, appear to be operating with much greater consistency of signaling and intra-communication that resulted in a target language construction that appeared to meet the linguistic needs of the audience. Again, the data reveal the team were making decisions about chunking the information based on the DI's cognitive preferences for managing the interpreting process. The length of time and the nature of the chunked information appeared to work very well within the team so that the interpretation was delivered in a manner that reflected simultaneous interpreting. The DI2 uses pauses to chunk the information while the CI2 use pauses and drops to signify chunks.

When we interviewed the teams after gathering the interpretation sample, we asked them to identify how they had prepared for the work. Both teams

reported reading the conference material. Team 2 reported that because they have worked together on numerous occasions that they have worked out the signals that work well for them, and by continuing to use the same signals, they have refined them in a way that they are subtle and purposefully not obvious to others. Team 1 also reported that they held a conversation about how to support each other, however they did not hold an explicit conversation about chunking, affirmations or accommodations.

Team 1 used many more noticeable signals to communicate to each other, and these were also visible to others watching. As well, they were using several strategies within the interaction to determine chunk size, which may be indicative that they were trying to determine what would work best for them to manage the information. One of the strategies of note was the rapid nods used by CI1, used to indicate the continuation of the SL and suggesting a negotiation of information management whilst being highly visible to the audience. This head nod did not however seem to have consistent shared meaning within the interpreting team, which may motivate the question being asked.

Ultimately, if interpreters are assigned to such teams, it would be helpful to have an explicit conversation about feeding preferences, process management strategies and preferences of each interpreter, signals to use when requesting feeds, affirmations and approaches to error management (see Russell 2008).

The second implication we draw relates to the need for interpreter coordinators to examine the decisions they make about team composition. The impact on the audience viewing the interpretation of team 1 was that the work was "busy" and less relaxed as a team when contrasted with team 2. This may have led the audience to make incorrect assumptions about the competence of the team and the fidelity of their interpretation from the

different indicator types within this setting, for example, when the CI1 was using head nods for affirmations. This could lead to an unsatisfactory conference experience. We suggest that the DI and CI need to share a common sign language and to gain team experience with each other that contributes to the development of trust. The data reveal that the team that had more experience working together were much more able to produce work that was effective with the CI providing feeds that enabled the DI to manage the cognitive process and language production well.

Recommendations

The following recommendations stem from the data

a. DI and CI teams need to have explicit conversations with each other, before working together, about how the feeding will happen and the nature of the feedback that is needed between the partners in order to produce effective work.

b. When at all possible, teams need to be able to meet the audience members who will be accessing the interpreting services in order to determine how best to target the interpretation.

c. Conference planners need to bring teams together that have experience working together as a team, prior to the conference event.

d. When developing professional development opportunities about working in DI-CI interpreting teams, curriculum should address the ways in which interpreters can prepare together, and the specific strategies the team will use to manage the interpreting process including the strategies that emerged in this study, i.e. chunking information, affirmations and accommodating.

Concluding remarks

In this paper we have described the initial results of our pilot study of DI and CI interpreting teams providing service into International Sign. We highlighted three strategies that emerged from the data and contrasted the work of two teams. This study is an exploratory study that has yielded interesting data and allowed us to pilot the technical aspects of data collection, data analysis and interview protocols. It will be useful to now extend the study to a much broader group of participants working in similar conference venues.

This case study approach has produced preliminary findings based on monologic discourse, however we do not know whether these findings would hold true for other dialogic settings. These data do however suggest that useful guidelines could be developed for DI and CI teams working in settings broader than the provision of International Sign, such as working into a second natural sign language and potentially in community settings and that the above recommendations may well be applicable. Further research of successful DI and CI teams where the process, product (via videoing of output) and thoughts regarding the process (via interview) are analysed along with the audience experience could be very fruitful.

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